D'AROY M GASHIN
705 NATIONAL STANDARD BUILDING
HOUSTON TEXAS

100 Orango Duran. 1000 0686751 16 1/2 4-42

Joplin, Missouri December 4, 1942

Mr George R. Brown Brown & Root, Inc. P. O. Box 3 Houston, Texas



Dear Mr. Brown:

Enclosed herewith please find the signed duplicate copy of our contract which was prepared by you and sent me by Mrs. Cashin. The contract is entirely satisfactory to me and I want to thank you sincerely for same and trust that the association shall prove as profitable as it has pleasant to date Please thank Miss Elliott for her part in expediting the matter also.

I wish to report that we now have in excess of 5,000 acres of leases approved and in the bank. We have the contracts out on about 1,600 acres which we hope will come in this coming week. The acreage we are now trying to get in is in smaller units and will naturally come in more slowly inasmuch as these landowners are scattered throughout the country. There are some difficult ones to whom I will have to make concessions in order to obtain their acreage but I am taking these in my stride. You can rest assured that no concessions will be made that will seriously impair our contract with the landowners

I have the suit to quiet title on the Trinit, Lead and Zinc under was at the present time. There is a good chance it will come up in court within the next week or ten days. I am trying to get an option on the minerals under this tract as it is appears to be a very desirable tract. This option we would naturally not attempt to exercise unless and until everything is satisfactorily straightened out in Washington.

There is an area in the vicinity of Duenweg (this is in the gouth part of our block) on which I can make a trade with the present owner of these leases for possibly a small overriding royalty and some other minor considerations From our subsurface work, it appears this area is very interesting. I vill not attempt to get this man's proposition, however, until I have the rest of the area fairly well completed and then any trade suggested will be subject to jour approval. However, it may be that this will fit very well into our picture inasmuch as the Federal and others are now dewatering in this area and erecting mills

At our last conference, if you remember, you made the statement to Mr. Herman Brown that one thing that was worrying you about this area was the fact that the Eagle Pitcher or the American Lead and Zinc Companies had made no attempt to acquire this area in the past even though it was known that the area was open and available.

With reference to the above, I told you that I was attempting to make arrangements with the American Lead and Zinc Company through Mr. Howard Young, or his assistants, to obtain access to their files and also to get a lease on a certain amount of acreage owned by them in the vicinity of Carterville. As you know, I was running up against some obstacles, especially after contacting Mr Westervelt,

Consulting Engineer for the War Production Board After pulling a lot of wires, Harry Easley has been able to contact some of the executives of the American Lead and Zinc Company and as a result, last week they turned over their files to us. We have unearthed a lot of data in the way of drill records, production data costs, etc that will be very helpful to us in presenting our case. Among other things, we found in the files a letter from Mr Wester-velt to the War Production Board with reference to the Webb City area, a photostatic copy of which is enclosed for your personal information. Mr Westervelt, as you know, is a prominent Consulting Mining Engineer of New York City. I understand that he was directly in the employ of the American Lead and Zinc for many years and has done consulting work for them as well. He made an examination of the American Lead and Zinc properties here for the W. P. B. and recommended the Webb City-Carterville area to the Var Production Board as an American Lead and Zinc Company operation.

With reference to the above, I do not know why Mr. Westervelt's recommendation was not carried out. We contacted the W. P. B about the same time which may, or may not, have had some bearing. The American Lead and Zinc Company was also carrying on their large aluminum project in Arkansas for the W. P. B. and it is entirely possible that they figured they had their hands full All of this, however, explains why they were reluctant to give us access to their data at that time and why Westervelt was "stand-offish" although his wife and Mrs. Cashin have become very good friends. Please keept the photostat of Mr. Westervelt's letter in your files as we are not supposed to display it

In conference with the American Lead and Zinc officials here a few days ago, they told me they would recommend to St. Louis that we be given the leases on their land that is located in our block. They will have to await instructions from Mr. Young and this office has little or no authority.

The War Production Board and the Bureau of Mines are displaying great interest in our project. Sometime ago they contacted Otto Ruhl, the Bureau of Mines engineer here, and asked for data on the churn drilling costs, possibilities of getting power and dewatering costs. Ruhl told me that the Bureau of Mines was attempting to obtain an appropriation whereby they would do the churn drilling for us with no cost to us. They are in hopes this will go through However Ruhl does not believe they could include the dewatering in their appropriation. Stewart and Ruhl got up an estimate here of the cost of pumping units and the time for delivery. However, the Pomona people from whom they go their figures could not give satisfactory delivery dates on the larger units. These were to have been three to five thousand gallon discharge requiring from 250 to 350 H P motors and these are extremely hard to get. The Pomona quoted a 28 week delivery. I told them this delivery date was impossible and that we would not consider the Through your office, therefore, I contacted the Layne and project on this basis Bowler people They had their man in Kansas City telephone me. We gave him an outline of our requirements. I had him break down the pumping units to not over 1500 gallons. As you know, these do not require over a 150 H P motor and are easier to get. Layne & Bowler quoted us a four week delivery on these units and out total cost will not be very much greater and the pumping system much more flexible. This seemed to satisfy the Bureau of Mines.

As to power, we have contacted the Empire District division of the Cities Service Company and they have stated, after investigation, that they can take care of us within a reasonable time by erecting a substation near Webb City. However, we will probably have to advance to them \$60,000.00 to cover the cost of this installation, the same to be deducted from our power bills As you know, this power credit would not be used up during the dewatering period but naturally it would be consumed during the mining and milling stage. This, I think, answers the power question.

As I told you. I am having tentative flow sheets constructed for the mill by different engineers. I have just received the first one and it is based on a three thousand ton through put which does not allow for the use of a Cone. The estimated cost of this mill erected with hoppers and sampling plant is \$340,000.00. I am having a Webb City foundry prepare an estimate based on a 4800 ton through put This also will not figure on the Gravity Cone but I will probably have the design so arranged that we can divert the stream through a Cone if we do desire. The chances are this mill will run somewhere close to \$500,000.00. In connection with this, a consulting engineer by the name of Henry is designing this mill for the Webb City foundry. He is one of the most prominent metallurgical engineers in this district and has been concerned one way or another in the construction of more than 75% of I have a tentative arrangement with this man that the mills in this district. in the event we go through with our project and construct a mill in this district, if you approve the idea, we can secure his services to supervise the construction of the mill for a retainer of \$500.00 a month during the construction period of the mill. Any future arrangement with him would be optional with us. Mr. Henry is indorsed not only by the Bureau of Mines! engineers but also by the executives of all the major companies in this district I figure he will be a very good man for us to have if we build and operate a mill.

In making a study of surface transportation problems, at the present time we figure it will be a combination of railroad haulage and truck haulage. Of course the truck haulage is much more flexible than the railroad but the ton mile cost is higher when all charges are considered. The Missouri Pacific Railroad has a branch line going through this area. In the past they have had spurs running out to the various properties and while the steel has been torn up on practically all spurs, the road-bed is still intact in most instances.

I have contacted the Missouri Pacific freight agents here and outlined our problem to them and they are now in contact with the home office and will try and give us a tentative rate on haulage from the various field hoppers to the central mill, the thought being that they would supply the ore cars and the locomotive and crews and we would pay a certain ton mile cost for the haulage.

After studying the problem, it appears as though if we can get a reasonable rate from them, it would probably be to our advantage to put as much of our tonnage as possible over the railroad. The Missouri Pacific states that they would not make much money out of hauling this tonnage but they figure they would make it up on the hauling of the concentrates from the mill Railroad steel is going to be a problem but I believe we can get around that in some way as we will probably not use over a sixty-five or seventy pound rail. Maybe Brown and Root have some extra rail we can use. I know that I sure want to get away from the truck haulage as much as possible for obvious reasons

We haven't definitely spotted the shafts from which we would start the first operations as yet and cannot do so until we have outlined our probable producing areas. This should be done in the coming week. Until this is done we cannot make estimates as to the amount of surface equipment necessary. However I will say this. Our present "horseback estimate" of the monies necessary to dewater the properties, erect the mill and construct surface equipment, open shafts and prepare the underground for mining, in fact do everything necessary to actually start mining underground, will necessitate an expenditure of about a million and a half dollars. This would include truck haulage and mechanical loaders, that is, both dragline scrapers and shovels. While this is based on considerable study, we are not prepared to give exact costs at the present time.

I am in hopes that through the exhaustive report that we are having prepared, that we can convince the War Production Board that the government should loan this entire sum, that is to say, approximately a million and a half dollars, this sum to be secured by the leases and equipment and we to take no personal liability.

I have several schemes in mind that might be advanced to the War Production Board for repayment of these monies. One, we might make a proposition that we will mine any and all ground that the government desires, that is to say, take as high a face as they wish which necessarily reduces our percentage of concentrates per ton of rock mined. Inthis way we would give them concentrates they would not get otherwise for the duration of the war at no cost to them except that they pay our actual operating expenses, overhead charges and royalty to the landowner and at the expiration of the war, they to turn over to us all mining and milling equipment which has been purchased and we to have title free of any lien. On this basis, I am assuming the duration of the war emergency at approximately eighteen to twenty-four months.

A second scheme would be that we either use selective mining, mine a lower face, increase our concentrate recovery, turn to the government all receipts over and above actual operating expense, this to include all overhead charges and royalty to the landowners. On this basis, we could possibly repay this loan in some time between one and a half and two years, depending upon the capacity of the mill and the character of the dirt mined or we could modify this to the extent of carrying an enlarged face, increase concentrate sales but it would also increase our various charges and still work out a repayment scheme along this line.

A third scheme would be that we mine a face whose height is to be set by the government, we to receive the gross receipts from the sale of concentrates and return to the government all bonus payments. There is good reason to believe under this scheme we would repay the loan by the end of the emergency, that is, within possibly two years' time.

The above are all haphazard thoughts upon my part but I am giving them to you asking that you give these matters some thought and probably we can arrive at some conclusion at our next meeting that will be acceptible to the War Production Board and ourselves.

As I told you, Mr. McMillian of the Bureau of Mines, stated that it was his belief the War Production Board would advance the monies to build the mill if we could show three years operation of the mill. I will say that although at this time we do not have our reserves computed, I do not think we will have any trouble showing the reserves necessary to operate this length of time, it is my thought and I know yours, that just on this basis, we would not be willing to go into the project.

Right along you have been asking me how long it would take to complete the report Bill Stewart and Otto Ruhl of the Bureau of Mines are preparing and I have always relayed to you the answer Bill gave me. This time I had him write me a letter which is herewith enclosed. I won't guarantee his time but I have been riding them all so strongly that I do hope they will stay within his estimate this time. If they do, we will be ready for you to come up here before Christmas, go over the entire project and advise me as to the type of trade you wish to make and then Stewart and I can head for Washington either accompanied by Mr. Butler, or meet him there. Mr. Westervelt informs me that the departments in Washington are going to work through Christmas Day. I will make my plans fit yours. As soon as I have something definite on Bill's report, I will contact you. In the meantime I am staying on the job and letting all other business of mine go by the boards until this is done. There are several things I would like you to personally discuss here such as the Webb City foundry's estimate of the cost on mining and milling equipment.

Enclosed you will find an excerpt from the Joplin paper with reference to Pat Reynolds' appointment as W. P. B. representative for the Tri-State area. Pat is a brother of Ben and controls with him the Independent Gravel Company. He is wealthier and a darn sight finer man than his brother. He will be in a position to materially assist us in getting priorities and making purchases and I feel will cooperate in every way he can.

In closing let me congratulate you in putting over the Rincon purchase for Rice Institute. I trust they will be far sighted enough to put you on the Board of Regents. You are a worthy son of a worthy school.

With kindest personal regards, I am,

Very sincerely yours

Arcy M Cashin

DMC/MRC

DI 000010446